

# Flavored Tobacco and Vaping Policy Considerations

**General Information Session** 

Presentation prepared by City of Bloomington Division of Public Health Association for Nonsmokers-Minnesota August 2020



## Presenters

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## Overview

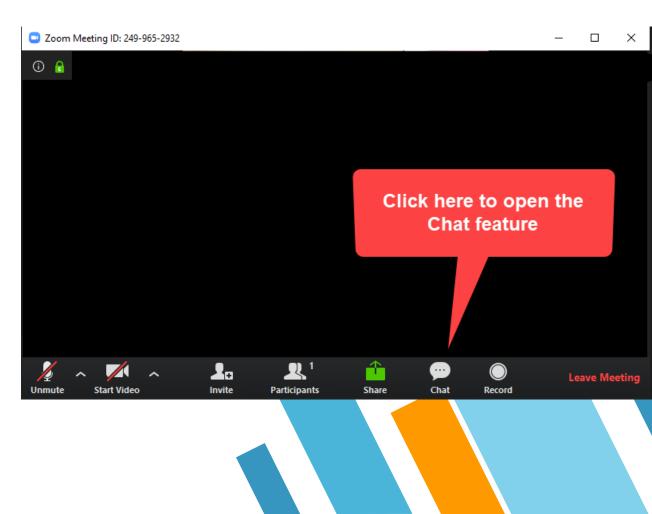
- Data on Youth Tobacco Use
- Overview of flavored tobacco and e-cigarettes
- Health effects of flavored tobacco and vaping
- Tobacco industry marketing
- Policies being considered in Bloomington
- Q & A





## Housekeeping

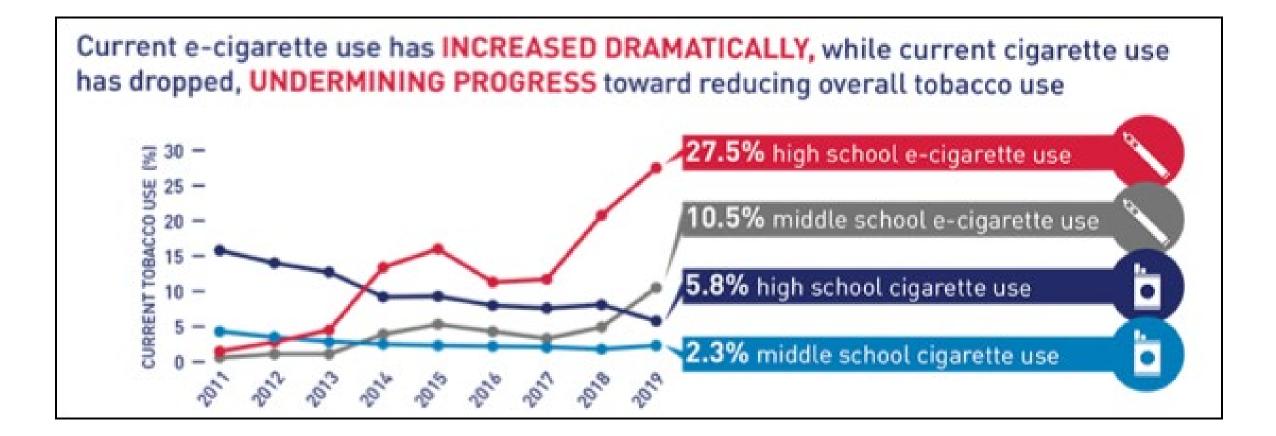
- » Don't talk over others, wait your turn or use the chat feature
- » Be respectful
- » Stay Focused on the Topic
- » Be aware of how much you're speaking
- » Recording for note taking purposes
- » Final report shared with council
- » Please note whether or not you are a Bloomington resident
  - ♦ CHAT → How many tobacco retailers are there in Bloomington? (Bloomington resident)
  - Or note if you are a resident before/after you speak



## Data on Youth Tobacco Use

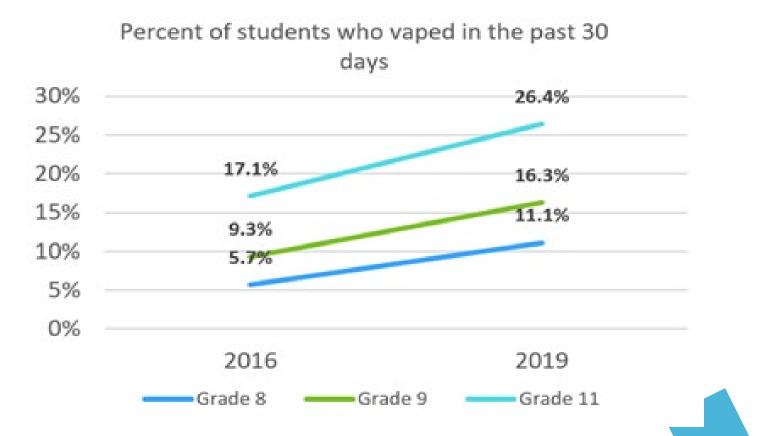


 Note: All images are either from ANSR, captured from tobacco sites online or industry social media sites or from fair use from across the Internet.



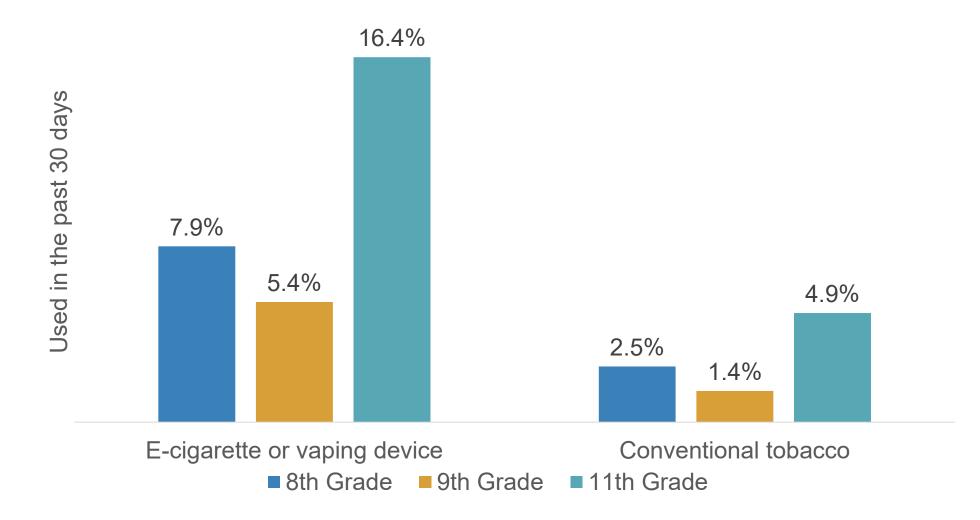
Source: 2019 National Youth Tobacco Survey

## E-Cigarette Use among MN Youth



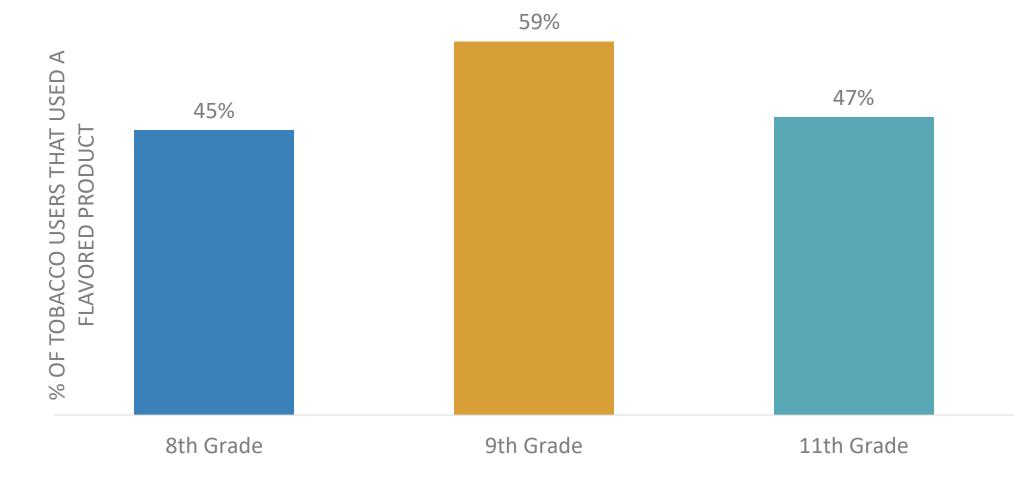
Source: 2019 Minnesota Student Survey

#### Tobacco Use by Type and Grade Bloomington Public School District, 2019



Source: 2019 Minnesota Student Survey

# Use of flavored tobacco products in last 30 days, among Bloomington youth tobacco users, 2019



Source: 2019 Minnesota Student Survey

## Health Effects of Flavored Tobacco Products

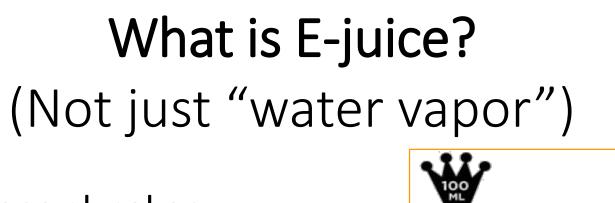


- » All e-cigs consist of a battery, heating element and cartridge to hold the e-juice.
- » The vaping device heats the e-juice, producing a nicotine aerosol that is inhaled.
- » Almost all e-juice contains varying levels of nicotine.

Source: Ingebrethsen, B. J., Cole, S. K. & Alderman, S. L. Electronic cigarette aerosol particle size distribution measurements. Inhal. Toxicol. 24, 976–84 (2012).

## The Evolution of Vaping Devices \_\_\_\_\_\_It's not flavor and water





- Propylene glycol or vegetable glycerin-based liquid with nicotine, flavoring and other chemicals and metals, but not tobacco.
- Many of these particles contain varying amounts of toxic chemicals and a wide variety of other substances.



## Chemicals in E-Liquid



E-cigarettes create many of the same CANCER-CAUSING CHEMICALS that are in cigarettes, like formaldehyde and volatile organic compounds.

### **E-cigarette Aerosol Composition**

	• P	ropylene glycol	•	Chlorobenzene	•	Benzo(ghi)perylen	e	Cadmium	
	• G	ilycerin	•	Crotonaldehyde	•	Acetone		<ul> <li>Silicon</li> </ul>	
	• F	lavorings (many)	•	Propionaldehyde	٠	Acrolein		Lithium	
	• N	icotine	•	Benzaldehyde	•	Silver		Lead	
	• N	NN	•	Valeric acid	٠	Nickel		<ul> <li>Magnesium</li> </ul>	
	• N	NK	•	Hexanal	•	Tin		<ul> <li>Manganese</li> </ul>	
	• NAB		All of these have been found				d	Potassium	
	• NAT							Titanium	
Ethylbenzene		in e-cig aerosol					Zinc		
	• B	enzene	•	Acenaphthylene	•	Aluminum		<ul> <li>Zirconium</li> </ul>	
	• X	ylene	•	Acenapthene	٠	Chromium		<ul> <li>Calcium</li> </ul>	
	• T	oluene	•	Fluoranthene	•	Boron		• Iron	
	• A	cetaldehyde	•	Benz(a)anthracene	•	Copper		<ul> <li>Sulfur</li> </ul>	
		maldehyde	•	Chrysene	٠	Selenium		<ul> <li>Vanadium</li> </ul>	
PREVENTION	ON N	phthalene	•	Retene	٠	Arsenic		<ul> <li>Cobalt</li> </ul>	
TOOLK	T	rene	•	Benzo(a)pyrene	•	Nitrosamines,		Rubidium	
nzo(b)fluoranthe		<ul> <li>Indeno(1,2,3- cd)pyrene</li> </ul>		Polycyclic aromatic hydrocarbons			Compounds in yellow are from FDA 2012, Harmful and Potentially Harmful Substances – Established List		

### Impact of Nicotine on the Adolescent Brain

- » No amount of nicotine is safe for youth.
- » Adolescent behaviors are largely driven by a strong emotional, reward-systems response as opposed to strong cognitive self- control and adult decision making strategies which are still developing.
- » As a result of the maturation process the adolescent brain is also MORE SENSITVE and VULNERABLE to the rewarding effects of NICOTINE.



Sources: Nelson et al. 2008. Abreu-Villaca et al. 2003.

## "Nic Sick" AKA Nicotine Poisoning

"I've currently been experiencing feelings of nic sick. I would describe it as the worst nausea, the worst headache, dizziness; I felt like I was going to faint."

> - Blaine, MN High School Junior describing her addiction to e-cigarettes.

- Symptoms include:
  - Nausea and vomiting
  - Racing heart
  - Sweating or clamminess
  - Anxiety
  - Abnormal heart rate
  - Extreme fatigue
  - Dizziness

## Impact on the Cardiovascular System

- » E-cigarette use linked to higher risk of stroke, heart attack and diseased arteries.
- New research finds e-cigarettes may be more harmful to the heart than traditional cigarettes.
- New study finds that vaping just once even when it doesn't contain nicotine or THC can damage a person's blood vessels.

Source: Alzahrani, Talal et al. Association Between Electronic Cigarette Use and Myocardial Infarct



## E-cigarette Impact on Your Lungs

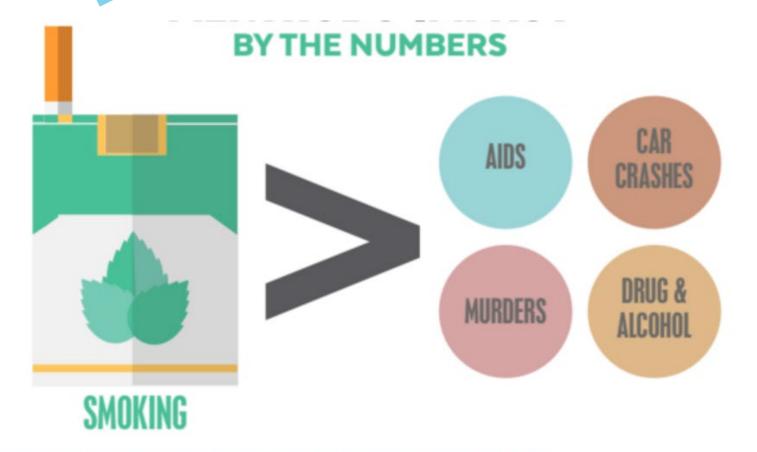
#### Vaping aerosols penetrate deeply into the respiratory system.

- » Can cause breathing difficulties
- » Lower defense against bacterial and viral pathogens
- » May harm cilia, the first line of defense in the lungs
- » Potential danger from metal coil element
   leaching heavy metals into the heated e-juice
   which is then inhaled



Source: Park 2019

#### Menthol = Easier to start, harder to Quit



• Increases nicotine absorption, leading to greater dependence.

• Among high school smokers, users more likely to smoke within one hour of waking and more likely to report cravings compared to high school smokers of non-menthols.

ACCORDING TO THE CENTERS FOR DISEASE CONTROL AND PREVENTION, smoking-related illnesses kill more Black Americans than AIDS, car crashes, murders and drug and alcohol abuse combined.<sup>1</sup>

THE AFRICAN AMERICAN TOBACCO CENTRAL LEADERSHIP COUNCIL

Source: Wackowski & Delnevo, 2007. Menthol cigarettes and indicators of tobacco dependence among adolescents. *Addictive Behaviors, 32*(9), 1964-1969.

## In the News



FOR DISEASE CONTROL AND PREVENTION

Illinois Patient's Death May Be First in US Tied to Vaping By The Associated Press Aug. 23, 2019 CHICAGO — Health officials said Friday that an Illinois patier ↑ | = ALL SECTIONS | P \* StarTribune

The New Hork Times

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Teen lung diseases linked to vaping, Minnesota Health **Department reports** Minnesota health officials raise alarm after four teens are

hospitalized.

By Jeremy Olson Star Tribune AUGUST 13, 2019 - 9:52PM



After having issued general warnings before, this is the first time Minnesota health officials have issued a public notice directly linking the use of vaping products to specific patient illnesses.

Four cases of severe lung injury in the Twin Cities are being linked to vaping and e-cigarette use, prompting state health officials to warn the public about the harm of these products and to advise doctors to be on the lookout.

**EVALI** Symptoms include: coughing, shortness of breath, chest pain, fatigue, nausea, and vomiting

Source: CDC releases from CDC.org

#### As of 2/18/20:

2,807 cases of lung illnesses associated with vaping in 50 states, U.S. territories and Washington, D.C.

More than 50% of cases are in people ages 13 - 24

68 confirmed deaths in 29 states and Washington, D.C.



## Tobacco Industry Marketing

- The tobacco industry
   spends \$110 million on
   marketing each year in
   Minnesota (2020)
- The industry is constantly
   looking to replace smokers
   who die from diseases
   related to tobacco use.



## Marketing of menthol tobacco







Source: Stanford School of Medicine

# Juul marketing campaign compared to Big Tobacco cigarette ads







## 2016





The New York Times

## Juul Bought Ads Appearing on Cartoon Network and Other Youth Sites, Suit Claims

The case, brought by Massachusetts after a lengthy investigation, presents some of the strongest evidence the vaping company was marketing to teenagers.

02/12/20





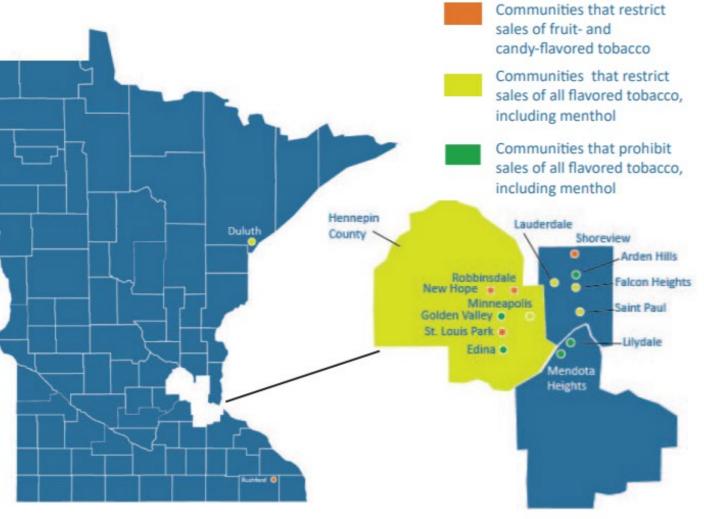
## Federal Landscape and Implications

- » January 2020: temporary ban on some pod-based, candyflavored e-cigarettes
- » Exempt: menthol, open-tank and disposable vaping products; flavored cigars and cigarillos

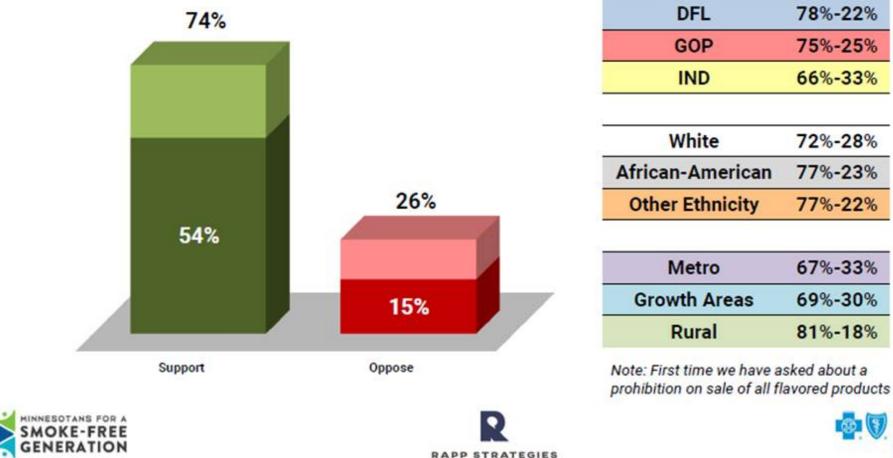


## Local Policies being Considered in Bloomington

- » Building/Strengthening federal ban
  - All flavors, including menthol
  - All products, including open tank, disposable and cigars/cigarillos
  - Adult only with licensing restrictions OR restricting sales to certain areas or types of retailers in the city
- » Other complimentary policies:
  - May be paired with a licensing cap
  - Tobacco retail buffers around parks and schools



#### SUPPORT FOR PROHIBITING SALES OF ALL FLAVORED **TOBACCO PRODUCTS (INCLUDING MENTHOL CIGARETTES)**



DFL	/8%-22%
GOP	75%-25%
IND	66%-33%
White	72%-28%
African-American	77%-23%
Other Ethnicity	77%-22%
Metro	67%-33%
Growth Areas	69%-30%

700/ 000/

81%-18%

DEI

Rural



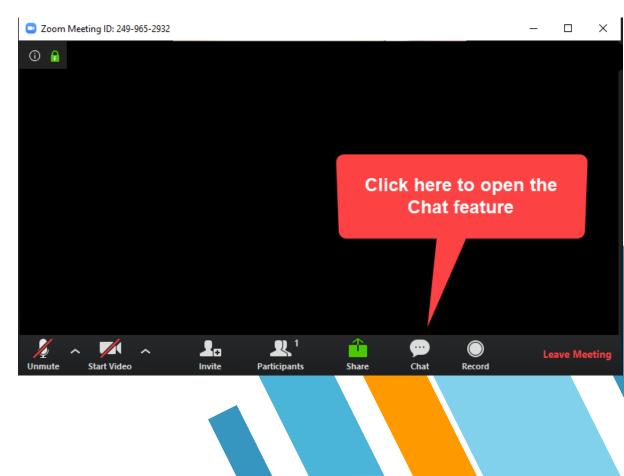


# Q&A



## Reminder...

- » Identify yourself as a Bloomington resident
- » Mute if you are not speaking
- » Don't talk over others, wait your turn or use the chat feature
- » Listen to understand
- » Be respectful
- » Stay focused on the question/topic
- » Be aware of how much you're speaking



#### Comments

• No comments received